

Rating

The `<aava-rating>` component provides an intuitive and accessible star rating interface with support for half-star ratings, multiple size variants, and comprehensive keyboard navigation. Perfect for user feedback, product reviews, and any scenario requiring rating input or display.

How to use

Basic Usage

Simple rating implementation with default 5-star scale and interactive functionality.

```
import { AavaRatingComponent } from "@aava/play-core";
```

Sizes

Four size variants to accommodate different interface densities and visual hierarchy requirements.

```
<aava-rating [value]="ratingValue" (rated)="onRatingChange($event)">&
</aava-rating>
```

Available Sizes

- xs (Extra Small) - 16px stars for very compact interfaces
- sm (Small) - 20px stars for dense interfaces
- md (Medium) - 24px stars for standard layouts (default)
- lg (Large) - 32px stars for prominent placements and better accessibility
- Custom - Numeric values for precise sizing requirements

Half-Star Ratings

Support for precise half-star ratings (e.g., 4.5 stars) with intuitive click positioning.

```
onRatingChange(value: number) {
  console.log('Rating changed to:', value);
}
```

Half-Star Features

- Click Positioning - Left half of star = half rating, right half = full rating
- Hover Preview - Visual feedback shows potential rating before clicking
- Precise Control - Support for ratings like 3.5, 4.5, etc.
- Intuitive UX - Natural interaction pattern users expect

Readonly Mode

Display-only mode for showing existing ratings without user interaction.

```
<!-- Different size variants -->
<aava-rating [value]="ratingValue" size="xs" (rated)="onRatingChange($event)">
</aava-rating>
<aava-rating [value]="ratingValue" size="sm" (rated)="onRatingChange($event)">
</aava-rating>
<aava-rating [value]="ratingValue" size="md" (rated)="onRatingChange($event)">
</aava-rating>
<aava-rating [value]="ratingValue" size="lg" (rated)="onRatingChange($event)">
</aava-rating>
<aava-rating [value]="ratingValue" [size]="40" (rated)="onRatingChange($event)">
</aava-rating>
```

Readonly Features

- Non-interactive - No click or hover effects
- Display Only - Perfect for showing existing ratings
- Accessibility - Maintains proper ARIA attributes
- Consistent Styling - Same visual appearance as interactive mode

Show Value

Display the numeric rating value alongside the visual stars.

```
ratingValue = 3.5;

onRatingChange(value: number) {
  this.ratingValue = value;
  console.log('Rating changed to:', value);
}
```

Value Display Features

- Numeric Rating - Shows exact rating (e.g., "4.5")
- Size Variants - Value text scales with star size
- Positioning - Value appears to the right of stars
- Formatting - Always shows one decimal place for precision

Custom Maximum

Flexible rating scales beyond the default 5-star system.

```
<!-- Half-star ratings -->
<aava-rating [value]="3.5" (rated)="onRatingChange($event)"></aava-rating>
<aava-rating [value]="4.5" (rated)="onRatingChange($event)"></aava-rating>
<aava-rating [value]="2.5" (rated)="onRatingChange($event)"></aava-rating>
<!-- Interactive half-star selection -->
<aava-rating
  [value]="currentRating"
  (rated)="ratingChange($event)"
></aava-rating>
```

Custom Scale Features

- Flexible Range - Support for 3, 4, 5, 10, or any number of stars
- Consistent Behavior - Same interaction patterns regardless of scale
- Half-Star Support - Works with any maximum value
- Accessibility - Proper ARIA attributes for custom scales

Accessibility

Accessibility Features

- Keyboard Navigation - Full keyboard support with arrow keys
- ARIA Compliance - Proper role="radiogroup" and aria-checked attributes
- Screen Reader Support - Clear announcements of current rating
- Focus Management - Visible focus indicators for keyboard users
- High Contrast - Enhanced visibility in high contrast modes
- Motion Preferences - Respects user's reduced motion settings

Keyboard Shortcuts

- Arrow Right/Up - Increase rating by 1 star
- Arrow Left/Down - Decrease rating by 1 star
- Enter/Space - Select the currently focused star
- Tab/Shift+Tab - Navigate between stars

API Reference

Inputs

Property	Type	Default	Description
value	number	0	Current rating value (supports halves like 4.5)
max	number	5	Maximum number of stars in the rating scale
readonly	boolean	false	Whether the rating is read-only (non-interactive)
size	number 'xs' 'sm' 'md' 'lg'	'md'	Size of the stars (predefined or custom pixel values)
showValue	boolean	false	Whether to display the numeric rating value

Outputs

Event	Type	Description
rated	EventEmitter<number>	Emitted when user changes the rating value

CSS Custom Properties

Property	Description
--rating-label-font-family	Font family for rating label text
--rating-label-font-weight	Font weight for rating label text
--rating-label-font-size	Font size (used as line-height) for rating label text
--rating-label-color	Text color for rating label
--rating-label-letter-spacing-sm	Letter spacing for small label text

Property	Description
--rating-label-letter-spacing-medium	Letter spacing for medium label text
--rating-label-letter-spacing-lg	Letter spacing for large label text
--rating-value-font-size-sm	Font size for small value variants (xs & sm)
--rating-value-font-size-md	Font size for medium value variant
--rating-value-font-size-lg	Font size for large value variant

Best Practices

Design Guidelines

- Choose appropriate sizes - Use larger sizes for primary rating displays, smaller for secondary
- Consider half-star support - Enable for precise rating needs, disable for simpler interfaces
- Show value when needed - Display numeric ratings for clarity in review systems
- Use consistent scales - Stick to common scales (5-star, 10-star) for user familiarity
- Position strategically - Place ratings near relevant content for context

Accessibility

- Always provide labels - Use descriptive labels for screen reader context
- Test keyboard navigation - Ensure full keyboard accessibility
- Consider motion preferences - Respect user's reduced motion settings
- Maintain contrast - Ensure sufficient contrast for all star states
- Provide alternatives - Consider text-based rating alternatives for complex cases

Performance

- Optimize re-renders - Use OnPush change detection strategy when possible
- Efficient event handling - Optimize mouse and keyboard event handlers
- Image optimization - Use optimized SVG assets for stars
- Memory management - Clean up event listeners properly

Form Integration

- Angular Forms - Integrate with reactive and template-driven forms

- Validation - Implement appropriate validation for rating inputs
- Default values - Provide sensible defaults for new ratings
- Error handling - Handle edge cases and invalid inputs gracefully

Use Cases

- Product Reviews - E-commerce product rating systems
- Service Feedback - Customer satisfaction ratings
- Content Rating - Movie, book, or content ratings
- Skill Assessment - Employee or skill evaluation systems
- Quality Metrics - Internal quality or performance ratings

Technical Notes

Star Asset Requirements

The component expects three SVG assets:

- star-filled.svg - For fully rated stars
- star-half.svg - For half-rated stars
- star-outline.svg - For empty stars

Half-Star Logic

Half-star ratings are determined by click position:

- Left half of star = index + 0.5
- Right half of star = index + 1.0

Size Mapping

Predefined sizes map to pixel values:

- extra small : 16px
- small : 20px
- medium : 24px (default)
- large : 32px

Custom numeric values are used directly for precise sizing requirements.

Event Handling

The component handles multiple interaction types:

- Mouse : Click for selection, hover for preview
- Keyboard : Arrow navigation, Enter/Space for selection
- Touch : Click events work on touch devices
- Programmatic : Direct value changes via input binding